

E. Relax tension on the hoist

F. Extend the landing gear dolly from the vehicle downward until the backbone beam is solidly held in place by force from the landing gear dolly and a reciprocal force from the ground engaging feet

G. Use the crane beam assembly of Claim 5 with a lifting crane beam to load and unload freight onto and from the vehicle bed.

## ABSTRACT

This invention deals with a multipurpose material-handling device. It is possible to quickly modify the backbone beam dolly to perform a variety of material-handling tasks.

In its most basic version the backbone beam dolly is equipped with a pair of non-swivel wheels forming a wheel assembly at one end and a pair of swivel wheels at the other end.

Four-wheel dollies can also be used to replace the wheel assemblies. A crane beam can be rigidly affixed to the backbone beam dolly. With the addition of the crane beam and outrigger it is possible to pick-up heavy loads safely and transport them over vast distances by manually towing the backbone beam dolly or towing it with a lightweight vehicle.

16 Claims, 18 Drawing Figures